

Johnson County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/8/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 44 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Johnson County economy.¹

These 44 sectors have a total direct output of approximately **\$2.14 billion** and support **7,843 jobs** in Johnson County. Running the model for all 44 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Johnson County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	7842.9	1.75%	\$636,928,138	1.41%	\$2,135,679,474	4.72%
Indirect Effect	3055.6	0.68%	\$363,915,980	0.80%	\$590,503,786	1.31%
Induced Effect	3125.6	0.70%	\$283,115,426	0.63%	\$455,746,601	1.01%
Total Effect	14024.0	3.13%	\$1,283,959,544	2.84%	\$3,181,929,861	7.03%

As shown in the above table, agriculture, food, and food processing sectors support **14,024 jobs**, or **3.13%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$3.18 billion**, roughly **7.03% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 44 agriculture, food, and food processing sectors is approximately **\$1.28 billion**, or **2.84% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **2.84% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

1 Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

2 Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

3 Value added = labor income + indirect business taxes + other property type income.

4 GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

5 Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the landscape and horticulture services sector is the top employer with **3,380 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Johnson County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Landscape and horticultural services	3,380.3	\$251,997,001
Veterinary services	1,131.0	\$119,862,539
Bread and bakery product, except frozen, manufacturing	780.6	\$105,892,974
Wholesale trade	654.1	\$185,487,920
Spice and extract manufacturing	376.8	\$232,202,955
Bottled and canned soft drinks & water	362.3	\$311,869,002
Real estate	296.2	\$67,520,530
Management of companies and enterprises	280.9	\$68,766,864
Full-service restaurants	274.6	\$13,953,266
All other food manufacturing	266.4	\$105,133,070

The fats and oils refining and blending sector directly contributes approximately **\$408.5 million** to the Johnson County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Fats and oils refining and blending	235.4	\$408,542,091
Bottled and canned soft drinks & water	362.3	\$311,869,002
Landscape and horticultural services	3,380.3	\$251,997,001
Spice and extract manufacturing	376.8	\$232,202,955
Wholesale trade	654.1	\$185,487,920
Flour milling	97.3	\$136,734,001
Veterinary services	1,131.0	\$119,862,539
Bread and bakery product, except frozen, manufacturing	780.6	\$105,892,974
All other food manufacturing	266.4	\$105,133,070
Flavoring syrup and concentrate manufacturing	19.8	\$69,623,112

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Johnson County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	13.1	\$8,113,603.59
Grain farming	14.3	\$3,127,240.18
Vegetable and melon farming	6.7	\$921,700.72
Fruit farming	6.1	\$378,728.84
Tree nut farming	0.0	\$75.93
Greenhouse, nursery, and floriculture production	64.7	\$6,370,347.98
All other crop farming	22.6	\$1,024,054.29
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	222.2	\$15,367,589.00
Dairy cattle and milk production	4.1	\$1,136,347.29
Poultry and egg production	0.4	\$191,047.56
Animal production, except cattle and poultry and eggs	224.8	\$16,989,398.96
Commercial logging	5.5	\$244,029.64
Commercial hunting and trapping	11.3	\$229,251.92
Dog and cat food manufacturing	3.0	\$5,205,444.81
Other animal food manufacturing	39.5	\$64,178,710.94
Flour milling	97.3	\$136,734,008.79
Malt manufacturing	32.6	\$48,307,689.67
Wet corn milling	2.5	\$4,371,026.52
Fats and oils refining and blending	235.4	\$408,542,114.26
Breakfast cereal manufacturing	0.3	\$180,171.37
Nonchocolate confectionery manufacturing	92.3	\$34,433,338.17
Confectionery manufacturing from purchased chocolate	91.1	\$33,202,854.16
Animal, except poultry, slaughtering	4.6	\$4,096,417.90
Meat processed from carcasses	19.3	\$12,208,117.49
Poultry processing	17.2	\$5,168,523.31
Bread and bakery product, except frozen, manufacturing	780.6	\$105,892,974.85
Frozen cakes and other pastries manufacturing	31.0	\$5,101,678.37
Cookie and cracker manufacturing	12.2	\$3,845,196.49
Dry pasta, mixes, and dough manufacturing	29.0	\$16,381,622.31
Coffee and tea manufacturing	16.5	\$10,326,424.60
Flavoring syrup and concentrate manufacturing	19.8	\$69,623,107.91
Spice and extract manufacturing	376.8	\$232,202,941.89
All other food manufacturing	266.4	\$105,133,064.27
Bottled and canned soft drinks & water	362.3	\$311,869,018.55
Breweries	20.7	\$12,296,550.75
Wineries	32.2	\$8,245,415.69
Distilleries	8.5	\$8,397,396.09
Paper mills	28.6	\$23,512,552.26
Nitrogenous fertilizer manufacturing	3.4	\$4,887,064.46
Lawn and garden equipment manufacturing	18.5	\$9,399,143.22
Food product machinery manufacturing	13.5	\$4,073,888.78
All other industrial machinery manufacturing	80.5	\$21,910,087.59

Veterinary services	1131.0	\$119,862,533.57
Landscape and horticultural services	3380.3	\$251,996,994.02

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Johnson County, the retail sector was omitted.